

Revision Number: 008.0 Issue date: 09/27/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:CM CAST WEAR COMP 6.8#IDH number:867295Product type:Epoxy resinItem number:10149106Restriction of Use:None identifiedRegion:United States

Restriction of Use: None ide Company address: Henkel Corporation

One Henkel Way Rocky Hill, Connecticut 06067 Contact information: Telephone: +1 (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (tollfree) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (tollfree) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: COMBUSTIBLE LIQUID.

CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE IRRITATION.
MAY CAUSE RESPIRATORY IRRITATION.

MAY DAMAGE FERTILITY OR THE UNBORN CHILD.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	4
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
REPRODUCTIVE TOXICITY	1B
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3





Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been

read and understood. Keep aw ay from heat, sparks, open flames, hot surfaces - no smoking. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of

the workplace. Wear protective gloves, clothing, eye and face protection.

Response: IF ON SKIN: Wash with plenty of water. IF INHALED: Remove victim to fresh air and keep at

rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unw ell. IF IN EYES: Rinse cautiously with waterfor several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. In case of fire: Use foam, dry chemical or carbon

dioxide to extinguish.

Storage: Store in a w ell-ventilated place. Keep container tightly closed. Store in a w ell-ventilated place.

Keep cool. Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*	
Silicon carbide	409-21-2	50 - 60	
Epichlorohydrin-4,4'-isopropylidene diphenol resin	25068-38-6	30 - 40	
Neopentyl glycol diglycidyl ether	17557-23-2	5 - 10	
Ethylene glycol	107-21-1	0.1 - 1	
Quartz (SiO2)	14808-60-7	0.1 - 1	

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give

artificial respiration. Get medical attention.

Skin contact: Immediately flush skin w ith plenty of w ater (using soap, if available). Remove

contaminated clothing and footwear. Get medical attention. Wash clothing

before reuse. Thoroughly clean shoes before reuse.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special fire fighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear.

Unusual fire or explosion hazards: In case of fire, keep containers cool with water spray. Closed containers may

rupture (due to build up of pressure) when exposed to extreme heat.

Hazardous combustion products: Oxides of carbon. Irritating vapors.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, is olate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sew er or waterways.

Clean-up methods:

Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wearfull protective equipment during cleanup. Refer to Section 8 "Exposure Controls / Personal Protection" prior to cleanup. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, saw dust). Scrape up spilled material and place in a closed container for disposal.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist.

Wash thoroughly after handling. Use only with adequate ventilation. Keep

container closed. Refer to Section 8.

Store in original container until ready to use. Keep container tightly closed and

in a cool, well-ventilated place away from incompatible materials. Keep away

from heat, spark and flame. Protect from direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	osha pel	AIHA WEEL	OTHER
Silicon carbide	3 mg/m3 TWA Respirable fraction. 10 mg/m3 TWA Inhalable fraction. 0.1 FIBERS/CM3 TWA Fiber.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 5 mg/m3 TWA Respirable fraction. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust.	None	None
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None
Neopentyl glycol diglycidyl ether	None	None	None	None
Ethylene glycol	25 ppm TWA Vapor fraction 50 ppm STEL Vapor fraction 10 mg/m3 STEL Aerosol, inhalable.	None	None	None
Quartz (SiO2)	0.025 mg/m3 TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.05 mg/m3 TWA (Respirable dust.) (Respirable dust.) 0.025 mg/m3 OSHA_ACT (Respirable dust.) 0.05 mg/m3 PEL Respirable dust.	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

show ers and eye wash stations should be available.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:PasteColor:GrayOdor:Slight

Odor threshold:

pH:

Vapor pressure:

Boiling point/range:

Melting point/range:

Not available.

Not available.

Not available.

Not available.

Not available.

1.7552

Vapor density: Heavier than air.

Flash point: 93 °C (199.4 °F); Estimated

Flam mable/Explosive limits - lower:
Flam mable/Explosive limits - upper:
Autoignition temperature:
Not available.
Not available.
Flam mability:
Not applicable
Evaporation rate:
Solubility in water:
Partition coefficient (n-octanol/water):
Not available.
Not available.

VOC content: < 1.0 %; < 10 g/l (value for resin and hardener together) (estimated)

Viscosity: Not available.

Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing.

Hazardous decomposition

products:

Oxides of carbon. Irritating vapors.

Incompatible materials: Oxidizing agents. Acids. Bases. Amines.

Reactivity: Not available.

Conditions to avoid: Keep aw ay from heat, ignition sources and incompatible materials. Protect from direct sunlight.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: May cause respiratory tract irritation. Abrasion of cured material such as by sanding or grinding

could release respirable particles of silica quartz, a cancer hazard by inhalation. Normal use of

this product causes no such release.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal tract irritation if sw allowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Silicon carbide	None	Nuisance dust
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	Allergen, Irritant
Neopentyl glycol diglycidyl ether	None	Allergen, Blood, Bone Marrow, Immune system, Irritant, Reproductive
Ethylene glycol	Oral LD50 (Rat) = 5.89 g/kg Oral LD50 (Mouse) = 14.6 g/kg Dermal LD50 (Rabbit) = 9,530 mg/kg	Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant, Kidney, Liver, Metabolic
Quartz (SiO2)	None	Immune system, Lung, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Silicon carbide	No	Group 2A	No
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No
Neopentyl glycol diglycidyl ether	No	No	No
Ethylene glycol	No	No	No
Quartz (SiO2)	Know n To Be Human Carcinogen.	Group 1	Yes

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name:
Hazard class or division:
Identification number:
Packing group:
Not regulated
None
None
None

International Air Transportation (ICAO/IATA)

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorhydrin

resin)
Hazard class or division:
9
Identification number:
UN 3082
Packing group:

IDH number: 867295 Product name: CM CAST WEAR COMP 6.8#

Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A

Epichlorhydrin resin)

Hazard class or division: 9 Identification number: UN 3082

Packing group:

Marine pollutant: Bisphenol-A Epichlorhydrin resin

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA Section 313: None above reporting de minimis.

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This

product contains a chemical known to the State of California to cause birth defects or other

reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic

Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2,3,8,11

Prepared by: Product Safety and Regulatory Affairs

Issue date: 09/27/2017

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IDH number: 867295 Product name: CM CAST WEAR COMP 6.8#



Revision Number: 006.0 Issue date: 09/21/2017

PRODUCT AND COMPANY IDENTIFICATION

LOCTITE PC 9628 COMPO known as **Product name:**

Nordbak Castable Wearing Com

Product type: Epoxy Hardener Restriction of Use: None identified

Company address: Henkel Corporation One Henkel Way

Rocky Hill, Connecticut 06067

IDH number: 702274

Item number: 98992_151000 Region: United States

Contact information:

Telephone: +1 (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711

TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: HARMFUL IN CONTACT WITH SKIN.

CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

MAY CAUSE AN ALLERGIC SKIN REACTION.

MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING

DIFFICULTIES IF INHALED.

SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY DERMAL	4
SKIN CORROSION	1B
SERIOUS EYE DAMAGE	1
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1
REPRODUCTIVE TOXICITY	2



Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been

> read and understood. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allow ed out of the workplace. Wear protective gloves, clothing, eye and face protection. In case of inadequate ventilation wear

respiratory protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off

immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with waterfor several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or

rash occurs: Get medical attention. Wash contaminated clothing before reuse.

Storage: Store locked up.

Product name: LOCTITE PC 9628 COMPO known as Nordbak Castable Wearing Com IDH number: 702274 Page 1 of 7

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	68953-36-6	40 - 50
N-Aminoethylpiperazine	140-31-8	20 - 30
Nonylphenol	25154-52-3	10 - 20
Diethylenetriamine	111-40-0	5 - 10
4,4'-lsopropylidenediphenol	80-05-7	5 - 10
Titanium dioxide	13463-67-7	1 - 5
Tetraethylene pentamine	112-57-2	1 - 5

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give

artificial respiration. Get medical attention.

Skin contact: Remove contaminated clothing and footwear. Immediately flush skin with

plenty of water (using soap, if available). Get medical attention. Wash clothing

before reuse. Thoroughly clean shoes before reuse.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get

medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

IDH number: 702274

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special fire fighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Unusual fire or explosion hazards: Burning produces obnoxious and toxic fumes. Personnel in vicinity and

dow nwind should be evacuated. Closed containers may rupture (due to build

up of pressure) when exposed to extreme heat.

Hazardous combustion products:

Oxides of carbon. Oxides of nitrogen. Aldehydes. Ammonia. Chlorine. Nitric

acid. Phenolics. Toxic fumes. Irritating vapors.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, is olate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sew er or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to

prevent entry into w ater system; w earfull protective equipment during cleanup. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Soak up w ith inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, saw dust). Scrape up spilled material and place in a closed

container for disposal.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist.

Wash thoroughly after handling. Do not taste or sw allow. Use only with

adequate ventilation. Keep container closed. Refer to Section 8.

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Keep away fromheat, spark and flame.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	osha pel	AIHA WEEL	OTHER
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	None	None	None	None
N-Aminoethylpiperazine	None	None	None	None
Nonylphenol	None	None	None	None
Diethylenetriamine	(SKIN) 1 ppm TWA	None	None	None
4,4'-lsopropylidenediphenol	None	None	None	None
Titanium dioxide	10 mg/m3 TWA	15 mg/m3 PEL Total dust. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Tetraethylene pentamine	None	None	(SKIN) Aerosol. 1 ppm (5 mg/m3) TWA Aerosol. (Skin sensitizer)	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use a NIOSH approved air-purifying respirator with an organic vapor cartridge.

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

show ers and eye wash stations should be available.

Product name: LOCTITE PC 9628 COMPO known as Nordbak Castable Wearing Com Page 3 of 7

Storage:

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact. Neoprene, Butyl-rubber, or nitrile-

rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid Color: Clear Odor: Slight, Amine Not available. Odor threshold: pH: Not available. Vapor pressure: Not available. Boiling point/range: Not available. Melting point/ range: Not available.

Specific gravity: 0.99

Vapor density: Not available.

Flash point: > 93 °C (> 199.4 °F) Setaflash Closed Cup

Flammable/Explosive limits - lower:
Flammable/Explosive limits - upper:
Autoignition temperature:
Not available.
Not available.
Flammability:
Evaporation rate:
Solubility in water:
Partition coefficient (n-octanol/water):
Not available.
Not available.
Not available.

VOC content: < 1.0 %; < 10 g/l (value for resin and hardener together) (estimated)

Viscosity: Not available.

Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing.

Hazardous decomposition

products:

IDH number: 702274

Oxides of carbon. Oxides of nitrogen. Aldehydes. Ammonia. Chlorine. Nitric acid. Phenolics.

Toxic fumes. Irritating vapors.

Incompatible materials: Acids. Oxidizing agents. Peroxides. Sodium hypochlorite. Nitrous acid and other nitrosating

agents. CAUTION! N-nitrosamines (many of w hich are known to be potent carcinogens) may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. This product slowly corrodes copper, aluminum, zinc and

galvanized surfaces.

Reactivity: Not available.

Conditions to avoid: Keep aw ay from heat, ignition sources and incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: May cause allergic respiratory reaction. These symptoms, which can include chest tightness,

w heezing, cough, shortness of breath or asthma attack, could be immediate or delayed (up to

several hours after exposure).

Skin contact: Harmful in contact with skin. Corrosive to skin. Causes skin burns. May cause allergic skin

reaction.

Eye contact: Causes serious eye damage. Burns of the eye may cause blindness.

Ingestion: Irritation and corrosive action can occur in the mouth, stomach tissue and digestive tract if

swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	None	No Records
N-Aminoethylpiperazine	None	Irritant, Corrosive, Allergen
Nonylphenol	Oral LD50 (Rat) = 1,600 mg/kg Dermal LD50 (Rabbit) = 2,140 mg/kg	Allergen, Corrosive, Irritant, Kidney
Diethylenetriamine	Oral LD50 (Rat) Approximate 1,140 mg/kg Oral LD50 (Rat) = 1,080 mg/kg Oral LD50 (Rat) = 2.33 g/kg	Allergen, Irritant, Eyes
4,4'-lsopropylidenediphenol	Oral LD50 (Rat) = 4,100 mg/kg Oral LD50 (Rat) = 3,300 mg/kg Oral LD50 (Mouse) = 5,280 mg/kg Oral LD50 (Mouse) = 2,500 mg/kg Oral LD50 (Mouse) = 4,100 mg/kg	Allergen, Blood, Irritant, Kidney, Reproductive, Spleen
Titanium dioxide	None	Irritant, Respiratory, Some evidence of carcinogenicity
Tetraethylene pentamine	Oral LD50 (Rat) = 3.99 g/kg Oral LD50 (Rat) = 2.1 g/kg Dermal LD50 (Rabbit) = 0.66 g/kg	Irritant, Mutagen, Allergen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	No	No	No
N-Aminoethylpiperazine	No	No	No
Nonylphenol	No	No	No
Diethylenetriamine	No	No	No
4,4'-Isopropylidenediphenol	No	No	No
Titanium dioxide	No	Group 2B	No
Tetraethylene pentamine	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information:

IDH number: 702274

Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: It is the responsibility of the user to determine if an item is hazardous as

defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics

Leaching Procedure (TCLP) 40 CFR 261.20-24.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Amines, liquid, corrosive, n.o.s. (Aminoethylpiperazine, Nonylphenol)

Hazard class or division: 8
Identification number: UN 2735
Packing group: Ⅲ

Marine pollutant: Nonylphenol

International Air Transportation (ICAO/IATA)

Proper shipping name: Amines, liquid, corrosive, n.o.s. (Aminoethylpiperazine, Nonylphenol)

Hazard class or division: 8
Identification number: UN 2735
Packing group: III

Water Transportation (IMO/IMDG)

Propershipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Aminoethylpiperazine, Nonylphenol)

Hazard class or division:

Identification number:

Packing group:

Marine pollutant:

UN 2735

UN 2735

Nonylphenol

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: Alkyl phenol (CAS# 25154-52-3).

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
CERCLA/SARA Section 313: This product contains the following

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Nonylphenol (CAS# 25154-52-3). 4,4'-Isopropylidenediphenol (CAS# 80-05-7).

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This

product contains a chemical known to the State of California to cause birth defects or other

reproductive harm.

Canada Regulatory Information

IDH number: 702274

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic

Substances List.

Product name: LOCTITE_PC 9628 COMPO known as Nordbak Castable Wearing Com

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16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2,3

Prepared by: Product Safety and Regulatory Affairs

Issue date: 09/21/2017

IDH number: 702274

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Revision Number: 008.0 Issue date: 09/27/2017

PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE PC 9628 COMPO known as

Nordbak Castable Wearing Compo

Product type: Epoxy resin Restriction of Use: None identified

Company address: Henkel Corporation One Henkel Way

Rocky Hill, Connecticut 06067

IDH number: 702273

98992_10149000 Item number: Region: United States

Contact information:

Telephone: +1 (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center

1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: COMBUSTIBLE LIQUID.

CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE IRRITATION. MAY CAUSE RESPIRATORY IRRITATION.

MAY DAMAGE FERTILITY OR THE UNBORN CHILD.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	4
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
REPRODUCTIVE TOXICITY	1B
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

PICTOGRAM(S)





Precautionary Statements

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Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been

> read and understood. Keep aw ay from heat, sparks, open flames, hot surfaces - no smoking. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of

the workplace. Wear protective gloves, clothing, eye and face protection.

Response: IF ON SKIN: Wash with plenty of water. IF INHALED: Remove victim to fresh air and keep at

rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unw ell. IF IN EYES: Rinse cautiously with waterfor several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. In case of fire: Use foam, dry chemical or carbon

dioxide to extinguish.

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Storage: Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place.

Keep cool. Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Silicon carbide	409-21-2	50 - 60
Epichlorohydrin-4,4'-isopropylidene diphenol resin	25068-38-6	30 - 40
Neopentyl glycol diglycidyl ether	17557-23-2	5 - 10
Ethylene glycol	107-21-1	0.1 - 1
Quartz (SiO2)	14808-60-7	0.1 - 1

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give

artificial respiration. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove

contaminated clothing and footwear. Get medical attention. Wash clothing

before reuse. Thoroughly clean shoes before reuse.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

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5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special fire fighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear.

Unusual fire or explosion hazards: In case of fire, keep containers cool with water spray. Closed containers may

rupture (due to build up of pressure) when exposed to extreme heat.

Hazardous combustion products: Oxides of carbon. Irritating vapors.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, is olate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sew er or waterways.

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Clean-up methods:

Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into w ater system; w earfull protective equipment during cleanup. Refer to Section 8 "Exposure Controls / Personal Protection" prior to cleanup. Soak up w ith inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, saw dust). Scrape up spilled material and place in a closed container for disposal.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist.

Wash thoroughly after handling. Use only with adequate ventilation. Keep

container closed. Refer to Section 8.

Store in original container until ready to use. Keep container tightly closed and

in a cool, well-ventilated place away from incompatible materials. Keep away

from heat, spark and flame. Protect from direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Silicon carbide	3 mg/m3 TWA Respirable fraction. 10 mg/m3 TWA Inhalable fraction. 0.1 FIBERS/CM3 TWA Fiber.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 5 mg/m3 TWA Respirable fraction. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust.	None	None
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None
Neopentyl glycol diglycidyl ether	None	None	None	None
Ethylene glycol	25 ppm TWA Vapor fraction 50 ppm STEL Vapor fraction 10 mg/m3 STEL Aerosol, inhalable.	None	None	None
Quartz (SiO2)	0.025 mg/m3 TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.05 mg/m3 TWA (Respirable dust.) (Respirable dust.) 0.025 mg/m3 OSHA_ACT (Respirable dust.) 0.05 mg/m3 PEL Respirable dust.	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

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Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

show ers and eye wash stations should be available.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: **Paste** Color: Gray Slight Odor:

Odor threshold: Not available. Not available. pH: Vapor pressure: Not available. Boiling point/range: Not available. Melting point/range: Not available. Specific gravity: 1.7552

Vapor density: Heavier than air.

Flash point: 93 °C (199.4 °F); Estimated

Flam mable/Explosive limits - low er: Not available. Flam mable/Explosive limits - upper: Not available. Autoignition temperature: Not available. Flam mability: Not applicable Evaporation rate: Not available. Solubility in water: Insoluble Partition coefficient (n-octanol/water): Not available.

< 1.0 %; < 10 g/l (value for resin and hardener together) (estimated) **VOC** content:

Viscosity: Not available. Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing.

Hazardous decomposition

products:

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Oxides of carbon. Irritating vapors.

Incompatible materials: Oxidizing agents. Acids. Bases. Amines.

Reactivity: Not available.

Conditions to avoid: Keep away from heat, ignition sources and incompatible materials. Protect from direct sunlight.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

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Potential Health Effects/Symptoms

Inhalation: May cause respiratory tract irritation. Abrasion of cured material such as by sanding or grinding

could release respirable particles of silica quartz, a cancer hazard by inhalation. Normal use of

this product causes no such release.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal tract irritation if sw allowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects	
Silicon carbide	None	Nuisance dust	
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	Allergen, Irritant	
Neopentyl glycol diglycidyl ether	None	Allergen, Blood, Bone Marrow, Immune system, Irritant, Reproductive	
Ethylene glycol	Oral LD50 (Rat) = 5.89 g/kg Oral LD50 (Mouse) = 14.6 g/kg Dermal LD50 (Rabbit) = 9,530 mg/kg	Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant, Kidney, Liver, Metabolic	
Quartz (SiO2)	None	Immune system, Lung, Some evidence of carcinogenicity	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Silicon carbide	No	Group 2A	No
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No
Neopentyl glycol diglycidyl ether	No	No	No
Ethylene glycol	No	No	No
Quartz (SiO2)	Know n To Be Human Carcinogen.	Group 1	Yes

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name:
Hazard class or division:
Identification number:
Packing group:

Not regulated
None
None

International Air Transportation (ICAO/IATA)

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorhydrin

resin)
Hazard class or division:
9
Identification number:
UN 3082
Packing group:

IDH number: 702273 Product name: LOCTITE PC 9628 COMPO known as Nordbak Castable Wearing Compo

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Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A

Epichlorhydrin resin)

Hazard class or division: 9 Identification number: UN 3082

Packing group:

Marine pollutant: Bisphenol-A Epichlorhydrin resin

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA Section 313: None above reporting de minimis.

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This

product contains a chemical known to the State of California to cause birth defects or other

reproductive harm.

Canada Regulatory Information

IDH number: 702273

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic

Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2,3,8, 11

Prepared by: Product Safety and Regulatory Affairs

Issue date: 09/27/2017

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